

**NOTATION ENABLING ALL ACTIVITY BETWEEN A SYSTEM AND A
USER TO BE DEFINED, AND METHODS FOR USING THE SAME**

Abstract of the Disclosure

5 An activity based notational system defines actions (or processes) occurring
between a user and a system using only four classes. *Inputters* describe data provided
by the user to the system, and *Outputters* are the inverse of *Inputters*. *Selectors*
describe items provided to the user by the system and the subsequent selection of
those items by the user. *Invokers* describe a user action that changes the system's
10 state without involving an exchange of data. In one embodiment, the notation is used
to enable GUI forms to be automatically generated from a flow diagram. In other
embodiments, a flow diagram is automatically generated when a GUI form created or
modified, test scripts based on the notation in a diagram are generated and executed,
test simulations of the system are executed, production of hardware components is
controlled by a CAD drawing, and the scope of a flow diagram is determined.